SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Scott Walker, Governor
Dave Ross, Secretary

February 7, 2012

STORMTECH
ADVANCED DRAINAINGE SYSTEMS (ADS)
SUSAN L MCNAMEE
70 INWOOD RD
ROCKYHILL CT 06067

STORMTECH
ADVANCED DRAINAGE SYSTEMS (ADS)
DAVID J MAILHOT
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Re: Description: STORMWATER DETENTION AND/OR INFILTRATION SYSTEM, ALTERNATE PLBG SYS
Manufacturer: STORMTECH
Product Name: STORMTECH UNDERGROUND STORMWATER CHAMBERS/ISOLATION ROW
Model Number(s): **DC-780 CHAMBER/DC-780 ISOLATION ROW/DC-780 END CAP**

STORMTECH DC-780 CHAMBER, DC-780 END CAP, DC-780 INFILTRATOR ROW
DESCRIPTION: injection-molded, polypropylene resin; subsurface, deep cover (12 ft.) structural chambers for storing/detaining/infiltrating/isolating TSS & stormwater below grade [85.4 IN. L X 51 IN. W X 30 IN. H; STORAGE PER UNIT: 46.2 CU FT/CHAMBER; 78.4 CU FT INSTALLED WITH MAX. 6 IN. STONE ABOVE, 9 IN. STONE BELOW AND 3 IN. STONE SIDES/BETWEEN CHAMBERS]

Product File No: 20120032

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of February 2017.**

This approval is contingent upon compliance with the following stipulation(s):

- This product is approved for the following uses, as specified in Table SPS 382.70-1:
  - Stormwater and clearwater subsurface detention system,
  - Stormwater and clearwater subsurface infiltration system, or
  - Stormwater and clearwater subsurface detention/infiltration system

- This product must be installed in accordance with the manufacturer's printed instructions, product approval and the plan approval. If there is a conflict between the manufacturer's instructions and the plan approval, the plan approval will take precedence.

- Prior to installation of this product, plans and specifications must be submitted to the department or to an approved agent municipality for review and approval in accordance with s. DSPS 382.20 (1) of the Wis. Admin. Code. Written approval for the plans and specifications shall be obtained prior to installation of the product.

- The installation of waterproof membranes must be either PVC or linear low density polyethylene (LLDPE) material having a minimum 30 mil thickness with all seams sealed. PVC membrane seams must be sealed using solvent cement. LLDPE membrane seams must be sealed using thermal welding.

- The review undertaken by department staff does not include review and/or approval of this submittal as meeting DNR specifications for ch. NR 151.

- When this product is installed, the installation must be in accordance with the manufacturer's printed design installation instructions, ch. DSPS 382, plan approval under s. DSPS 382.20, and any product approval stipulations. When there is a conflict between manufacturer's installation instructions and plan approval conditions or product approval stipulations, the plan approval conditions or product approval stipulations will take precedence.

- Installation-- Installation of this product must be in accordance with the manufacturer's printed installation instructions. A copy of the manufacturer's installation instructions must be given to the property owner, installer and submitted along with other information required by the governing agency for the installation.

- This product may be installed without a waterproof membrane under the following conditions:

  1. The installation is not for a subsurface detention system;

  2. The soils on which that detention system is placed have a maximum soil application rate of 0.2 gallons/square foot/day based upon morphological soil evaluation as listed in SPS Table 383.44-2 under the column for BOD5 and TSS > 30mg/L; and

  3. A geotextile fabric that meets the chamber manufacturer's specifications is in place on the bottom of the product is required.

- When used as a stormwater and clearwater subsurface infiltration system, this product may be installed without a waterproof membrane for use as under the following conditions:
  1. The requirements contained in WDNR TECHNICAL STANDARD for Site Evaluation for Stormwater Infiltration (SOC 1002 rev. 02/04); see http://dnr.wi.gov/runoff/pdf/stormwater/techstds/post/dnr1002-Infiltration.pdf
  2. The soils on which that detention system is placed have a maximum soil application rate of 0.2 gallons/square foot/day based upon morphological soil evaluation as listed in SPS Table 383.44-2 under the column for BOD5 and TSS > 30mg/L; and
  3. A geotextile fabric that meets the chamber manufacturer's specifications is place on the bottom of the product is required.

- When this product is installed as a subsurface detention/infiltration system or an infiltration system, the design and installation must be in accordance with the manufacturer's printed MC-3500 and MC-4500 Design Manual (S250211) and Installation Instructions (S150409), ch. SPS 382 and its Plan approval under s. SPS 382.20. When there is a conflict between manufacturer's installation instructions and plan approval or product approval stipulations, the plan approval or product approval stipulations will take precedence.

- SIZING: For manufacturer's site CALCULATORS, see: http://www.stormtech.com/resources/calculator.html .

- When this product is installed as a subsurface detention system, the installation must be in accordance with the manufacturer's printed instructions. When there is a conflict between the manufacturer's installation instructions and plan approval or product approval stipulations, the plan approval or product approval stipulations will take precedence.

  Sizing of piping for stormwater and clearwater subsurface detention shall be made using hydraulic calculations as specified in manufacturer's instructions.

- This product must be permanently labeled identifying the manufacturer and model number (StormTech DC-780).

- Any plumbing plans that include this device(s) and submitted to the department (or its agents) shall be accompanied by an acceptable modeling method, such as outlined in Method for Predicting the Efficiency of Proprietary Storm Water Sedimentation Devices (1006) for the specific site where the installation of this device(s) is planned. The submitted calculations, based on site-specific inputs, shall predict the removal efficiencies by concentration and percentage. For particle size distribution, in SLAMM use file: NURP.cpz.
  For a copy of this standard, see:
  http://dnr.wi.gov/runoff/pdf/stormwater/techstds/prop_devices_std_v2_051408.pdf

- Any plumbing plans that include this device(s) and submitted to the department (or its agents) shall be accompanied by an acceptable modeling analysis for the specific site where the installation of this device(s) is planned. The submitted calculations, based on site-specific inputs, shall predict the removal efficiencies by concentration and percentage for both TSS and O&G. For particle size distribution, use the EPA-NURP (National Urban Runoff Program] distribution.

- Written approval for the plumbing plans shall be obtained from the department for each installation of this system. If the project is located within the city of Milwaukee or another agent having plumbing stormwater review status, plans may be submitted to either the department or to the agent municipality; see http://dsps.wi.gov/sb/SB-PlumbingAgentMunis.html .

- **Additional information is included as attachment(s) to this letter; see attachment A, B and C.**

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

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